

Reliability Services – Phase 2 Straw Proposal

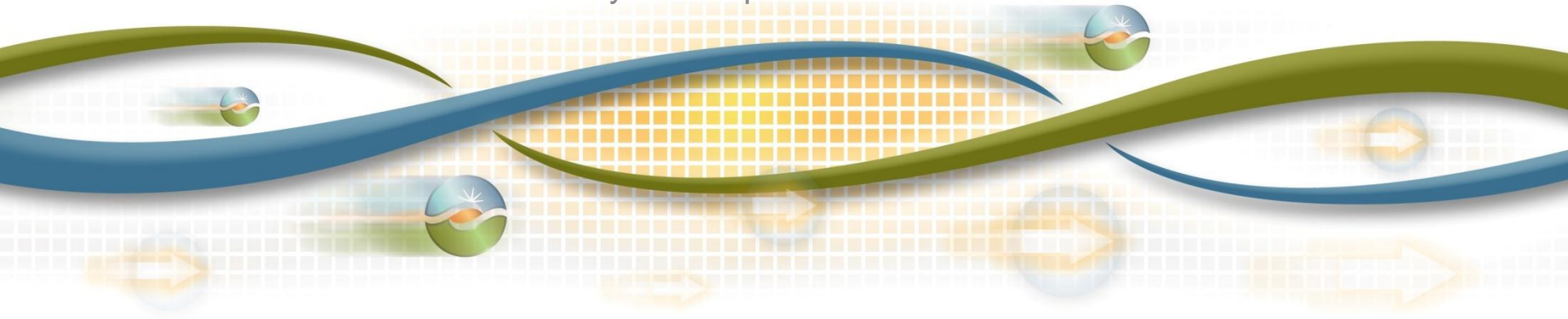
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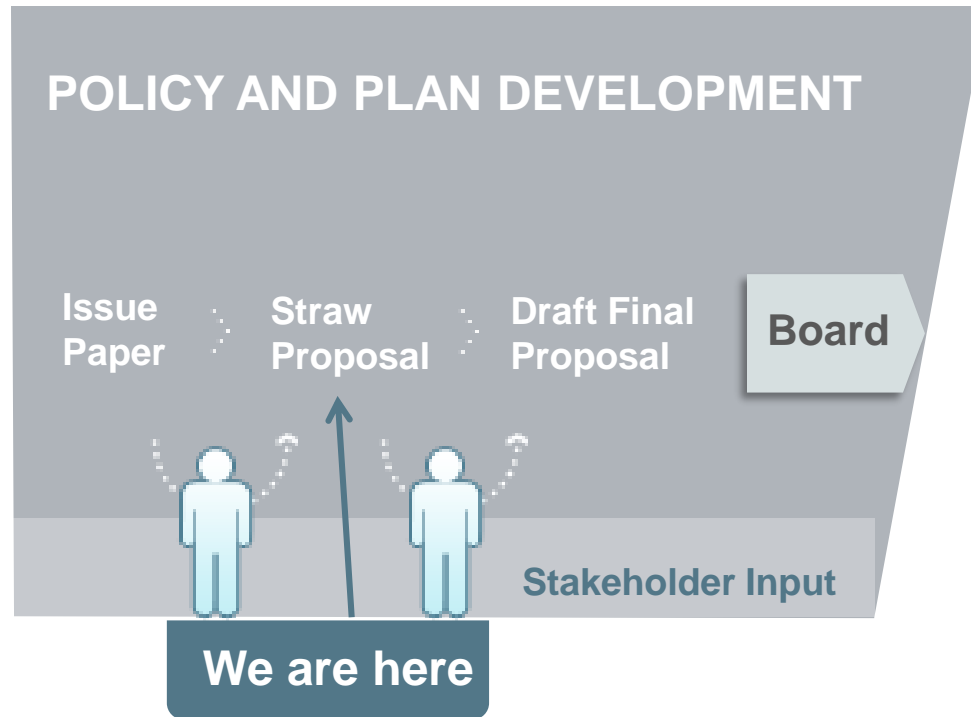
Market and Infrastructure Policy Developer



Stakeholder Meeting – Agenda – 8/26/15

Time	Topic	Presenter
10:00 – 10:15	Introduction	Tom Cuccia
10:15 – 11:15	LRA and ISO process alignment	Perry Servedio
11:15 – 12:00	Planned outage substitution for flexible capacity	Eric Kim
12:00 – 1:00	Lunch	
1:00 – 1:45	Planned and forced outage substitute capacity in local capacity areas	Karl Meeusen
1:45 – 2:00	Forced outage local capacity substitution option	Brian Theaker
2:00 – 2:45	Updating EFC	Karl Meeusen
2:45 – 3:00	Break	
3:00 – 3:45	Combination flexible capacity resources	Karl Meeusen
3:45 – 4:00	Next Steps	Tom Cuccia

ISO Policy Initiative Stakeholder Process



Timeline

Date	Reliability Services Initiative – Phase 2
September 9, 2015	Comments due on straw proposal
October 7, 2015	Revised straw proposal posted
October 14, 2015	Stakeholder meeting on revised straw proposal
October 24, 2015	Comments due on revised straw proposal
November 4, 2015	Draft final proposal posted
November 11, 2015	Stakeholder meeting on draft final proposal
December 1, 2015	Comments due on draft final proposal
Feb 3-4, 2016	Board of Governors

The goal of this initiative is to continue improving aspects of the ISO's availability, outage substitution and replacement rules, and clarifying the RA process.

1. Develop a template that captures and codifies RA requirements contained in an LRA's RA program documentation
2. Develop planned outage substitute capacity rules for flexible capacity resources
3. Assess the adequacy of existing planned and forced outage substitution rules for local capacity resources.
4. Establish a change management process for resources that require updated Effective Flexible Capacity (EFC) quantities
5. Design the rules needed to apply the RAIM to combination flexible capacity resources

STAKEHOLDER COMMENTS

Tom Cuccia

Stakeholder Comments

- The ISO should consider seasonal local capacity requirements
 - Determinations regarding local capacity requirements and how they are established (including how frequently) falls within the scope of the ISO's annual local capacity requirements study process
- “Partial” local RA capacity resources
 - This issue falls within the scope of this initiative, and the ISO will consider it as part of the local capacity discussion

LRA AND ISO PROCESS ALIGNMENT

Perry Servedio

Proposal

- The ISO proposes to release a template that will specify the information needed regarding an LRA's RA program
- This questionnaire will not change the provisions of an LRA's RA program, it will serve only to standardize the manner in which the information is provided to the ISO

Why the process alignment is needed

- The goal is to provide LRAs and market participants clear guidance on when LRA requirements or ISO default provisions apply
- Will allow market participants to better understand their obligations under the ISO tariff and mitigate potential deficiencies

Components of the template

The LRA would need to provide the following information for both their annual and monthly RA showing:

1. Annual/monthly planning reserve margin
2. Annual/monthly evaluation of the requirements the LSE must show (percentage)
3. Annual/monthly individual peak demand & reserve margin requirement for each LSE

Components of the template

4. Annual/monthly individual local capacity requirement for each LSE
5. Annual/monthly individual local requirements if the LRA has a different local requirement allocation
6. Annual/monthly individual flexible evaluation
7. Annual/monthly individual flexible requirements if an LSE has a different flexible requirement than the ISO

Components of template for credits

The following components are for LRA RA programs that allow the use of credits to meet peak demand & reserve margin requirement:

1. Annual/monthly system/local demand response eligible
2. Annual/monthly system/local demand response adjustment
3. Annual/monthly system/local reliability must run eligible

Components of template for credits

4. Annual/monthly system/local cost allocation mechanism eligible
5. Annual/monthly system/local liquidated damages eligible
6. Annual/monthly system/local other credit eligible

Timeline

- The ISO will need information for the upcoming RA compliance year prior to the first business day in September
- The ISO will run validations of the data from the template, gather the proper LRA documentation to align configurations and implement any system updates if needed
- If the ISO does not receive a completed template, the ISO will use its configuration defaults for that compliance year

PLANNED OUTAGE SUBSTITUTION RULES FOR FLEXIBLE CAPACITY RESOURCES

Eric Kim

Proposal

- In the event of a planned outage for flexible RA capacity, the ISO will allow the scheduling coordinator for the capacity to provide planned outage substitute capacity
- Any substitution capacity must be eligible to provide at least the same category of flexible capacity as the capacity that goes on a planned outage
 - Category 1 (Base)
 - Category 2 (Peak)
 - Category 3 (Super Peak)

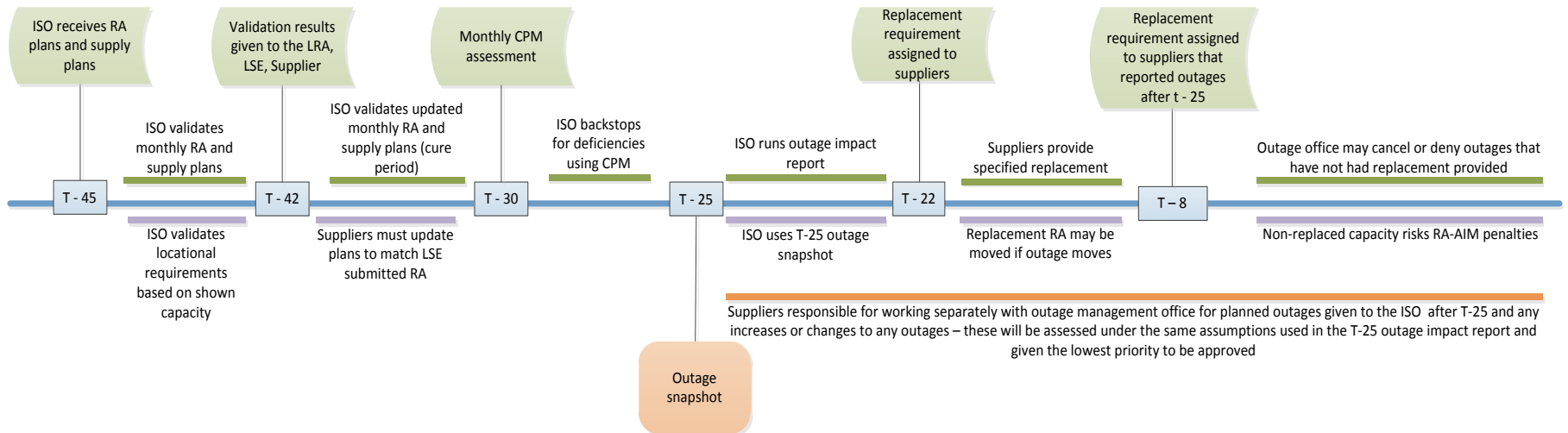
When the planned outage occurs

- A scheduling coordinator can provide flexible substitute capacity beyond the amount on outage without any limits
- It is up to the scheduling coordinator to tell the ISO how much RA capacity it wants assigned to the substitute resource
- The substitute resource will need to provide the total quantity that was a result from the planned outage

Timeline

- The ISO proposes to apply the same timeline for flexible capacity resources on planned outages as it proposed in RSI1B for resources on planned outages
 - The RSI 1B timeline will go into effect in 2017

Timeline



PLANNED AND FORCED OUTAGE SUBSTITUTE CAPACITY FOR RA RESOURCES IN LOCAL CAPACITY AREAS

Karl Meeusen

Current treatment for local resources on planned outages

- If a resource is **not needed** to meet local reliability, the ISO may approve the outage, but allow for replacement capacity from system resources
- If a resource **is needed** for local reliability, the ISO will deny the planned outage and request the SC of the resource reschedule the outage
 - If the resource cannot defer the outage, then the outage must be taken as a forced outage and is subject to RAAIM

Proposal for local resources on planned outages

- If the resource is needed for local reliability and cannot defer the outage, it can provide replacement from another local capacity resource
 - Allows resource to avoid taking a planned outage
 - Provides ISO greater assurance that local reliability is not compromised by the outage

Proposal for local capacity resources on forced outages

The ISO reviewed three options:

1. Status quo: like-for-like substitute capacity or be subject to RAIM charges (No Change)
2. Local RA showing study: Only study capacity reflected in the local RA showing towards meeting local capacity requirements
3. ISO discretion: Resource request the ISO to grant a waiver of the local-for-local substitution requirement

Option one: Make no change

- FERC has found the ISO's LCR study process and treatment of resources in local capacity areas to be just and reasonable
- Therefore, absent a compelling alternative that ensures local reliability is not degraded by replacing a resource in a local capacity area going on a forced outage with a system resource, the ISO will consider the status quo as the default policy

Option two: Removing system resources from the LCR studies

- The ISO only studies capacity reflected in a local RA showing towards meeting local capacity requirements
- All other capacity would be considered system capacity and would not be included in the LCR assessment

Potential issue with option two

- May not accurately reflect the need or the extent of compliance with the LCR criteria for any given local area or sub-area
 - Removed capacity resources may still impact the local capacity area
- For example, a system resource in a local area may have a negative impact on that local area under certain conditions
 - If the ISO did not model that resource as part of the local capacity assessment and/or validation, it may appear as though there are adequate local resources in an area when in reality, there are not

Option three: ISO has discretion regarding local or system substitution

- A resource in a local capacity area that goes on a forced outage would have to request the ISO to grant a waiver of the local-for-local substitution requirement

Potential issue with option three

- The ISO would have to make a discretionary decision that may not work in certain future grid conditions
 - i.e. Subsequent changes in load and transmission availability condition
- It might be difficult with multiple resources on outage at a given time
 - The ISO would need to develop a mechanism that determines when system replacement was allowable and when it is not

PROCESS FOR UPDATING RESOURCES' EFC AND/OR OPERATIONAL PARAMETERS

Karl Meeusen

How the ISO will use use-limitation information

- In CCE2, the ISO established a process by which SCs for use-limited resources will provide resources' statutory, regulatory, court-imposed, or operational use-limitations to the ISO
- The ISO will utilize the data to determine whether a resource qualifies to provide Base, Peak, or Super-Peak flexible capacity
- The use of the monthly use-limitation data ensures the ISO has more data than daily limits to base category qualifications

Masterfile changes that impact the quantity of EFC the resource may be able to provide

- Some resource parameters determine the quantity of flexible capacity a resource can provide
 - i.e. The start-up time determines whether a resource's PMin is eligible to provide flexible capacity
- A resource may request a change to Masterfile that increases the start-up time, lowering the EFC of the resource
- RAIM tool developed in RSI1 is sufficient to address these changes

Masterfile changes that impact the category of EFC the resource may provide

- Some resource parameters determine the category of flexible capacity a resource can provide
 - Minimum down time and daily starts determine whether a resource qualifies to provide base ramping flexible capacity
- Resources could reduce the number of starts per day after it has been qualified for a given category
- Even if base ramping resource bids during all hours, the ISO would optimize the resource as though it has one start

Proposal

- Resources that change Masterfile parameters such that they do not meet the minimum requirements of the category are not bidding consistently with the applicable MOO
- Apply the RAAIM to resources where Masterfile changes disqualify them from providing a flexible capacity category
 - i.e . Assess as unavailable under RAAIM resources that change Masterfile parameters that lower the flexible capacity category eligibility to a category below the one for which it is shown
 - RAAIM applies as of the date of the Masterfile change
 - Resources may provide substitute capacity to avoid exposure to RAAIM charges

COMBINATION FLEXIBLE CAPACITY RESOURCES

Karl Meeusen

Combination flexible capacity resources are currently exempt from RAAIM

- Combination flexible capacity resources are a pair of flexible capacity resources that individually do not meet the requirements for a higher flexible capacity category, but when combined are able to meet the requirements for the higher category
- Revised tariff language in FRACMOO filing ensures that at least one of the combined resources is available to the ISO
- Needed tariff provisions and structure needed to apply the RAAIM rules to combination flexible capacity have not been developed

Proposal

- Create a limited exception to allow for one flexible capacity resource per LSE that does not meet the monthly start limitations for a given category to be shown in a higher flexible capacity category
- Exempt resource will be held to all of the performance and availability requirements of the higher flexible capacity
 - Daily starts and
 - Must-offer obligation hours

Resource eligibility criteria

- The resource must have either a calculated or negotiated opportunity cost for its use-limitation
- ISO will calculate the resource's opportunity cost using the minimum availability requirements for the flexible capacity category for which it is shown
 - Appropriately reflects the requirements of the applicable flexible capacity category
 - i.e. If a resource with 45 starts per month is shown as a base flexible capacity resource, then the ISO would calculate the opportunity cost of those starts assuming 60 starts per month
- If use-limitation reached, RAAIM would apply if substitute capacity is not provided

NEXT STEPS

Tom Cuccia

Timeline

- Stakeholder comments on the straw proposal are due September 9, 2015; submit to initiativecomments@caiso.com
- Revised straw proposal will be posted on October 7, 2015
- A stakeholder meeting will be held on October 14, 2015